

AMENDMENTS TO THE DRAWINGS

Please replace the originally filed drawings, Figures 1-14 (13 sheets) with the replacement drawings, Figures 1-14 (13 sheets), submitted herewith.

Attachment: Figures 1-14 (13 sheets)

REMARKS

The Office Action mailed August 18, 2009 has been carefully considered and the following response prepared. Claims 1-15 and 17-30 are pending in the application. Claims 17-30 have been withdrawn from consideration.

Claim 1 has been amended as discussed below to delete parts c, d, and e. Claim 1 has also been amended to delete reference to non-elected subject matter, SEQ ID NOS: 2, 3 and 62. No new matter has been added.

OBJECTION TO THE DRAWINGS

At page 2 of the Office Action, the Examiner objected to the drawings, stating that they were not suitable for publication.

Applicants submit herewith replacement drawings for Figures 1-14 (13 sheets). Withdrawal of this objection to the drawings is respectfully requested.

REJECTION UNDER 35 USC 112, FIRST PARAGRAPH, WRITTEN DESCRIPTION

At page 2 of the Office Action, the Examiner rejected claims 1-15 under 35 USC 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner alleged that, given the lack of description of the necessary elements essential for endosperm activity, it is unclear what features identify the instantly claimed genus of sequences that hybridize to SEQ ID NO: 1, or sequences having at least 70% sequence identity, or sequences that comprise a nucleotide sequence that is conserved among the sequences of the instant claims.

Applicants traverse this rejection. Claim 1 has been amended to delete parts c, d and e, relating to sequences having at least 70 % sequence identity with a sequence as defined in (a), sequences hybridizing with the complementary strand of a sequence as defined in (a) and/or (b) under stringent conditions, and sequences that comprise a nucleotide sequence which is

conserved among at least two of SEQ ID NO: 1 to 3 or SEQ ID NO: 62, respectively, and which correspond to the parts of claim 1 that the Examiner alleged failed to comply with the written description requirement of section 112, first paragraph.

Amended claim 1 is directed to an isolated nucleic acid molecule that has promoter activity specific to the endosperm and that comprises a DNA sequence selected from the group consisting of : a) a sequence as depicted as SEQ ID NO: 1 and b) a fragment of a sequence as defined in (a), wherein the sequence has promoter activity specific to the endosperm. Claims 2-15 depend directly or indirectly from claim 1, and are also amended by the amendment to claim 1.

Amended claim 1 and claims 2-15, which depend directly or indirectly from claim 1, comply with the written description requirement of section 112, first paragraph. Withdrawal of this section 112, first paragraph rejection is respectfully requested.

REJECTION UNDER 35 USE 112, FIRST PARAGRAPH, ENABLEMENT

At page 7 of the Office Action, the Examiner rejected claims 1-15 under 35 USC 112, first paragraph as not enabled. The Examiner stated that the specification, while being enabling for an isolated endosperm specific promoter of SEQ ID NO: 1, does not reasonably provide enablement for sequences that hybridize to SEQ ID NO: 1, or sequences that have at least 70% sequence identity to SEQ ID NO: 1, or sequences that have some unspecified conserved sequence also found in SEQ ID NO: 1, all of which having endosperm specific promoter activity.

Applicants traverse this rejection. Claim 1 has been amended to delete parts c, d and e, relating to sequences having at least 70 % sequence identity with a sequence as defined in (a), sequences hybridizing with the complementary strand of a sequence as defined in (a) and/or (b) under stringent conditions, and sequences that comprise a nucleotide sequence which is conserved among at least two of SEQ ID NO: 1 to 3 or SEQ ID NO: 62, respectively, and which correspond to the parts of claim 1 that the Examiner alleged were not enabled by the specification. Claims 2-15 depend directly or indirectly from claim 1, and are also amended by the amendment to claim 1.

Amended claim 1 is directed to an isolated nucleic acid molecule that has promoter activity specific to the endosperm and that comprises a DNA sequence selected from the group consisting of : a) a sequence as depicted as SEQ ID NO: 1 and b) a fragment of a sequence as defined in (a), wherein the sequence has promoter activity specific to the endosperm.

The specification enables amended claim 1 and claims 2-15, which depend directly or indirectly from claim 1. Withdrawal of this section 112, first paragraph rejection is respectfully requested.

REJECTION UNDER 35 USC 102(b)

At page 9 of the Office Action, the Examiner rejected claims 1-7 and 9-13 under 35 USC 102(b) as anticipated by Sevilla-Lecoq et al., Sex Plant Reprod, vol. 16, pages 1-8, 2003. The Examiner remarked that the claims are broadly drawn to isolated polynucleotide sequences that have endosperm specific promoter activity having an unspecified conserved sequence and transformed plant cells and plant parts thereof. The Examiner contended that Sevilla-Lecoq et al. teaches particle bombardment of maize embryos with an expression construct comprising a ZmAE endosperm specific promoter, which comprises a conserved feature as set out in claim 1, fused to the GUS coding region, and thus anticipates claims 1-7 and 9-13.

Applicants traverse this rejection.. As discussed above, claim 1 has been amended to delete part e relating to sequences that comprise a nucleotide sequence which is conserved among at least two of SEQ ID NO: 1 to 3 or SEQ ID NO: 62.

Amended claim 1 is directed to an isolated nucleic acid molecule that has promoter activity specific to the endosperm and that comprises a DNA sequence selected from the group consisting of : a) a sequence as depicted as SEQ ID NO: 1 and b) a fragment of a sequence as defined in (a), wherein the sequence has promoter activity specific to the endosperm. Claims 2-7 and 9-13 depend directly or indirectly from claim 1, and are amended by the amendment to claim 1.

Sevilla-Lecoq et al. discloses studies on the upstream sequences of the maize gene ZmAE3. During normal reproductive development ZmAE3 is specifically expressed in the

embryo-surrounding region of the endosperm. The authors identified several motifs in the upstream sequences of the ZmAEE3 gene, as shown in Table 1 in the publication.

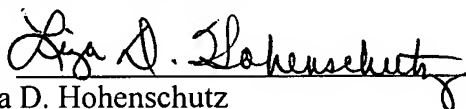
Sevilla-Lecoq et al. does not disclose SEQ ID NO: 1 or a fragment of SEQ ID NO: 1, wherein the sequence has promoter activity specific to the endosperm. Sevilla-Lecoq therefore does not anticipate claim 1 or claims 2-7 and 9-13 which depend directly or indirectly from claim 1. Withdrawal of this section 102(b) rejection is respectfully requested.

Reconsideration of the application is respectfully requested and an early Notice of Allowance is earnestly solicited.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 11887-00008-US from which the undersigned is authorized to draw.

Dated: November 18, 2009

Respectfully submitted,

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